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CENTRAL FAX CENTER****OCT 28 2005****FAX TRANSMISSION****DATE:** October 28, 2005**PTO IDENTIFIER:** Application Number 08/728,463-Conf. #2701  
ALLOWED SEPTEMBER 20, 2005**Inventor:** Nils Lonberg et al.**MESSAGE TO:** US Patent and Trademark Office  
Examiner P. J. Nolan  
Art Unit 1644**FAX NUMBER:** (571) 273-8300**FROM:** DARBY & DARBY P.C.

Jeffrey C. Pepe

**PHONE:** (206) 262-8911**Attorney Dkt. #:** 04280/1201643-US2**PAGES (Including Cover Sheet):** 22**CONTENTS:** Certificate of Transmission (1 page)  
Transmittal (1 page)  
Request For Acknowledgment Of Previously Submitted Information Disclosure Statement  
(IDS) (2 pages)  
Copy of IDS Postcard (1 page)  
Copy of IDS of 01/24/97 (2 pages)  
Copy of PTO-1449 (12 pages)  
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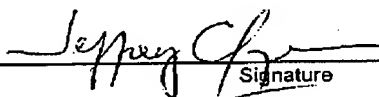
Application No. (if known): 08/728,463

Attorney Docket No.: 04280/1201643-US2

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Transmittal (1 page)

**Request For Acknowledgment Of Previously Submitted Information****Disclosure Statement (IDS) (2 pages)**

Copy of IDS Postcard (1 page)

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	08/728,463-Conf. #2701	
	Filing Date	October 10, 1996	
	First Named Inventor	Nils Lonberg	
	Art Unit	1644	
	Examiner Name	P. J. Nolan	
Total Number of Pages in This Submission	22	Attorney Docket Number	04280/1201643-US2

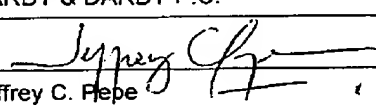
## ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): See Remarks below
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## Remarks

Request for Acknowledgement of IDS (2 pp), Copy IDS Postcard (1 page), Copy IDS of 1/24/97 (2 pages), Copy of PTO-1449 (12 pages), Copy of Refs Sent Postcard (1 page), Copy of Transmittal of Refs Sent (1 page), Certificate of Facsimile Transmittal (1 page), Fax Cover (1 page)

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	DARBY & DARBY P.C.		
Signature			
Printed name	Jeffrey C. Pepe		
Date	October 28, 2005	Reg. No.	46,985

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OCT 28 2005

Docket No.: 04280/1201643-US2  
(PATENT)**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Nils Lonberg et al.**Allowed: September 20, 2005**

Application No.: 08/728,463

Confirmation No.: 2701

Filed: October 10, 1996

Art Unit: 1644

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For: TRANSGENIC NON-HUMAN ANIMALS  
FOR PRODUCING HETEROLOGOUS  
ANTIBODIES

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Examiner: P. J. Nolan

**REQUEST FOR ACKNOWLEDGMENT OF PREVIOUSLY SUBMITTED  
INFORMATION DISCLOSURE STATEMENT (IDS)**MS Issue Fee  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Commissioner:

This application has been allowed and the issue fee is due December 20, 2005.

It has come to our attention that the Form PTO-1449 (12 pages) submitted with the initial Information Disclosure Statement (IDS) in the instant application, has not yet been acknowledged.

The IDS, Form PTO-1449, and 5 references were mailed on January 24, 1997 and received by the U.S. Patent and Trademark Office (USPTO) on January 28, 1997 (please see attached copy of return receipt postcard). The USPTO PAIR system shows that the IDS was filed, and a copy of the 2 pages of IDS appears on the Image File Wrapper on PAIR. However, a copy of the 12 pages of PTO-1449 does not appear on the Image File Wrapper for this application, nor do the 5 references submitted.

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Request For Acknowledgment Of Previously  
Submitted Information Disclosure Statement (IDS)  
Application No.: 08/728,463 2

Docket No.: 04280/1201643-US2

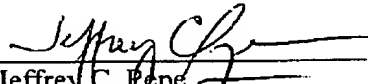
Our records also show that copies of these references were forwarded to Examiner Amy Decloux on March 9, 2001 and received by the USPTO on March 15, 2001 (see attached copy of Return Receipt Postcard and Transmittal form).

Accordingly, Applicants respectfully request that the 12 pages of PTO-1449, originally submitted January 28, 1997 (as noted above and enclosed herewith), be reviewed by the Examiner and acknowledged.

Applicants appreciate the Examiner's prompt response to this submission.

Dated: October 28, 2005

Respectfully submitted,

By   
Jeffrey C. Pepe  
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**COPY**APPLICANT **U.S. LONBERG et al.**Title: **TRANSGENIC NON-HUMAN ANIMALS FOR  
PRODUCING HETEROLOGOUS ANTIBODIES**Serial No: **08/728,463** Filed: **October 10, 1995**Fee (if any) **\$0.00** Check Enclosed ☐ Yes ☒ No

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§1.98

2. Form PTO-1449 listing references A1-C101

3. 5 References

4. Postcard

Due Date: \_\_\_\_\_

Date Mailed: **1/24/97**Atty/Secy **RTA/dmv**File No.: **014643-009020US**

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on 1/24/97

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Attorney Docket No. 014643-009020US

TOWNSEND and TOWNSEND and CREW LLP

By Karin M. Villanueva

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

NILS LONBERG et al.

Application No.: 08/728,463

Filed: 10 October, 1996

For: TRANSGENIC NON-HUMAN  
ANIMALS FOR PRODUCING  
HETEROLOGOUS ANTIBODIES

Examiner: UNASSIGNED

Art Unit: UNASSIGNED

INFORMATION DISCLOSURE  
STATEMENT UNDER37 CFR §1.97 and §1.98Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The disclosures cited on attached form PTO-1449 are being called to the attention of the Examiner. Copies of some of the disclosures (references A1-C96) are not being provided pursuant to 37 C.F.R. 1.98(d), as those disclosures have been previously cited by or submitted to the Patent Office in prior applications Serial Nos. 07/810,279, 07/853,408, 08/161,739, 08/165,699, 08/096,762, 08/352,322, and 08/209,741, to which the above identified application claims priority.

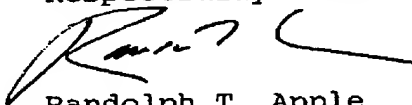
This information disclosure statement is being filed before the mailing date of the first office action on the merits.

Niels LONGBERG et al.  
Application No.: 08/728,463  
Page 2

PATENT

It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the disclosures be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Respectfully submitted,



Randolph T. Apple  
Reg. No. 36,429

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FORM PTO-1449 (Modified,

Attorney Docket No.  
14643-009000Serial No.  
08/352,322LIST OF PATENTS AND PUBLICATIONS  
FOR APPLICANT'S INFORMATION  
DISCLOSURE STATEMENT  
(Use Several Sheets if Necessary)Applicant  
NILS LONBERG and ROBERT M. KAY

PAGE 1 OF 12

Filing Date  
December 7, 1994Group  
1804Reference DesignationU.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Class	Subcl:	File Date If Approp
A1	4,204,244	04/20/93	Fell et al.	435		
A2	5,175,384	12/29/92	Krimpenfort	800		
A3	5,434,340	07/18/95	Krimpenfort	800		

**COPY**FOREIGN PATENT DOCUMENTS

Document No.	Date	Country	Class	Subcl:	Trans. Yes No
B1	EP 0 315 062	05/10/89	EP		
B2	WO 90/04036	04/19/90	PCT		
B3	WO 90/12878	11/01/90	PCT		
B4	WO 92/03918	03/19/92	PCT		
B5	WO 91/10741	07/25/91	PCT		
B6	WO 91/00906	01/24/91	PCT		

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

C1	Alt et al., Immunoglobulin genes in transgenic mice, TIG - August 1985
C2	Berman et. al., Content and organization of the human Ig V <sub>H</sub> locus: definition of three new V <sub>H</sub> families and linkage to the Ig C <sub>H</sub> locus, The EMBO J. 7:727-738 (1988)
C3	Berton et. al., Synthesis of germ-line $\gamma 1$ immunoglobulin heavy-chain transcripts in resting B cells: Induction by interleukin 4 and inhibition by interferon $\gamma$ , Proc. Natl. Acad. Sci. (U.S.A) 86:2829-2833 (1989)
C4	Bollag et al., Homologous recombination in mammalian cells, Annu. Rev. Genet. 23:199-225 (1989)

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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PAGE 3 OF 11

Filing Date  
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1804OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

- \_\_\_\_\_ C5 Bruggemann et al., Human antibody production in transgenic mice: expression from 100 kb of the human IgH locus, Eur. J. Immunol. 21:1323-1326 (1991)
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1804OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

- C13(i) Ferrier et al., Separate elements control DJ and VDJ rearrangement in a transgenic recombination substrate, The EMBO J. 9:117-125 (1990)
- C14 Forni, extensive splenic B cell activation in IgM-transgenic mice, Eur. J. Immunol. 20:983-989 (1990)
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- C16 Goodhardt et al., Rearrangement and expression of rabbit immunoglobulin  $\kappa$  light chain gene in transgenic mice, Proc. Natl. Acad. Sci. (U.S.A.) 84:4229-4233 (1987)
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- C21 James and Bell, Human monoclonal antibody production current status and future prospects, J. of Immunol. Methods 100:5-40 (1987)
- C22 Jasin and Berg, Homologous integration in mammalian cells without target gene selection, Genes & Development 2:1353-1363 (1988)

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- \_\_\_\_\_ C23 Kenny et al., Alternation of the B cell surface phenotype, immune response to phosphocholine and the B cell repertoire in M167  $\alpha$  plus  $\kappa$  transgenic mice, J. of Immunol. 142:4466-4474 (1989)
- \_\_\_\_\_ C22(i) Jung et al., Shutdown of class switching recombination by deletion of a switch region control element, Science 259:984-987 (1993)
- \_\_\_\_\_ C24 Kitamura et al., A B cell-deficient mouse by targeted disruption of the membrane exon of the immunoglobulin  $\mu$  chain gene, Nature 350:423-426 (1991)
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- \_\_\_\_\_ C31 Mansour et al., Disruption of the proto-oncogene int-2 in mouse embryo-derived stem cells: a general strategy for targeting mutations to non-selectable genes, Nature 336:348-352 (1988)
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- \_\_\_\_\_ C37 Murray & Szostak, Construction of artificial chromosomes in yeast, Nature 305:189-193 (1983)
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1804OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

- \_\_\_\_\_ C41 Nussenzweig et al., A human immunoglobulin gene reduces the incidence of lymphomas in c-Myc-bearing transgenic mice, Nature 336:446-450 (1988)
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- \_\_\_\_\_ C47 Ravetch et al., Evolutionary approach to the question of immunoglobulin heavy chain switching: Evidence from cloned human and mouse genes, Proc. Natl. Acad. Sci. (U.S.A.) 77:6734-6738 (1980)
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- \_\_\_\_\_ C50. Rothman et al., Structure and expression of germline immunoglobulin  $\gamma 3$  heavy chain gene transcripts: implications for mitogen and lymphokine directed class-switching, Intl. Immunol. 2:621-627 (1990)
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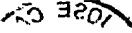
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LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) Page 12 of 12			Applicant: Niels LONGBERG et al.			
			Filing Date: 10/10/96		Group: UNASSIGNED	
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___ C97	Chen et al. (1989) Arthritis Rheum. 32:72 Title: Characterization Of Two Immunoglobulin V <sub>H</sub> Genes That Are Homologous To Human Rheumatoid Factors					
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Application No.:	08/728,463	Filed:	October 10, 1996
Inventor(s):	LONBERGet al.		
Title:	TRANSGENIC NON-HUMAN ANIMALS FOR PRODUCING HETEROLOGOUS ANTIBODIES		

References cited in the Information Disclosure Statement previously filed and referenced in the parent case, application no. 08/352,322

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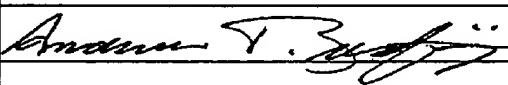
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	Filing Date	October 10, 1996	
	First Named Inventor	Lonberg, Nils, et. al.	
	Group Art Unit	1644	
	Examiner Name	DeCloux, Amy	
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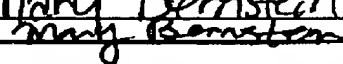
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